



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,428	11/07/2000	Steve King	CROSS-1360-1	9715

25094 7590 11/05/2003

GRAY, CARY, WARE & FREIDENRICH LLP
1221 SOUTH MOPAC EXPRESSWAY
SUITE 400
AUSTIN, TX 78746-6875

EXAMINER

JACOBS, LASHONDA T

ART UNIT PAPER NUMBER

2157

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/707,428

Applicant(s)

KING ET AL.

Examiner

LaShonda T. Jacobs

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5 and 7-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Daly et al (hereinafter, "Daly", 6,393,014).

As per claim 1, Daly discloses a system for routing data across heterogeneous networks comprising:

- a first network having a first protocol (abstract and col. 3, lines 17-36);
- a second network having a second protocol, wherein the second protocol is incompatible with the first protocol (abstract and col. 3, lines 17-36);
- a first device connected to the first network (abstract and col. 3, lines 17-36);
- a second device connected to the second network (abstract and col. 3, lines 17-36); and
- a switch coupled between the first network and the second network (col. 5, lines 23-42);
- wherein requests from the first device to the second device are formatted according to the first protocol and transmitted to the switch (abstract, col. 3, lines 17-67 and col. 4, lines 1-25); and

Art Unit: 2157

- wherein the switch is configured to detect the requests and to reformat the requests according to the second protocol and transmit the requests to the second device (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 2, Daly discloses:

- wherein the first network is an out-of-band network and the second network is an in band network (col. 1, lines 22-67, col. 2, lines 1-3, and col. 3, lines 17-32).

As per claim 3, Daly discloses:

- wherein the switch comprises an HTTP server coupled to an HTTP client, wherein the HTTP server is configured to receive the requests formatted according to the first protocol from the first device and wherein the HTTP, client is configured to forward corresponding requests formatted according to the second protocol to the second device (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 4, Daly discloses:

- wherein the system further comprises a default gateway coupled to the first network (col. 4, lines 27-37).

As per claim 5, Daly discloses:

- wherein the system further comprises a proxy server coupled to the first network (col. 4, lines 27-37).

As per claim 7, Daly discloses:

- wherein the request includes an IP address corresponding to the switch and information identifying the second device and the subject of the request (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

Art Unit: 2157

As per claim 8, Daly discloses:

- wherein the switch is configured to receive the requests and to identify the requests as being directed to the second device (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 9, Daly discloses:

- wherein each of the requests includes a keyword which indicates that the subject of the request should be forwarded to a device connected to the second network and wherein the switch is configured to identify the requests as being directed to the second device by detecting the keyword (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 10, Daly discloses a method for routing data across heterogeneous networks comprising:

- formulating a first request for data in a first device (abstract, col. 3, lines 17-67 and col. 4, lines 1-25);
- transmitting the first request to a switching device via a first network, wherein the first request is transmitted according to a first protocol (abstract, col. 3, lines 17-67 and col. 4, lines 1-25);
- formulating in the switching device a second request corresponding to the first request (abstract, col. 3, lines 17-67 and col. 4, lines 1-25);
- transmitting the second request to a second device via a second network, wherein the second request is transmitted according to a second protocol and wherein the second protocol is incompatible with the first protocol (abstract, col. 3, lines 17-67 and col. 4, lines 1-25);

Art Unit: 2157

- formulating a first response in the second device, wherein the first response is responsive to the second request (abstract, col. 3, lines 17-67 and col. 4, lines 1-25);
- transmitting the first response to the switching device via the second network, wherein the first response is transmitted according to the second protocol (abstract, col. 3, lines 17-67 and col. 4, lines 1-25);
- formulating in the switching device a second response corresponding to the first response (abstract, col. 3, lines 17-67 and col. 4, lines 1-25); and
- transmitting the second response to the first device, wherein the response is transmitted according to the first protocol (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 11, Daly discloses:

- wherein the switching device comprises a server coupled to the first network and a client coupled to the second network, wherein transmitting the first request to the switching device comprises transmitting the first request to the server and wherein formulating the second request comprises the client formulating the second request (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 12, Daly discloses:

- wherein the first request and the second request ask for the same data (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 13, Daly discloses:

- wherein the first response and the second response provide the same data (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 14, Daly discloses:

Art Unit: 2157

- wherein formulating the requests comprises formulating HTTP requests (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 15, Daly discloses:

- wherein transmitting the first request to a switching device comprises transmitting the first request to a device other than a default gateway (col. 4, lines 27-37).

As per claim 16, Daly discloses:

- wherein transmitting the first request to a switching device comprises transmitting the first request to a device other than a proxy server (col. 4, lines 27-37).

As per claim 17, Daly discloses:

- wherein formulating the first request comprises formulating a uniform resource locator (URL) that includes an IP address corresponding to the switching device and information identifying the subject of the request (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 18, Daly discloses:

- wherein formulating the first request comprises formulating a URL that further comprises an address of the second device (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 19, Daly further discloses:

- switching device identifying the first request as being directed to a device connected to the second network (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 20, Daly further discloses:

Art Unit: 2157

- switching device formatting the subject of the first request in the second request and forwarding the second request to the second device (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 21, Daly further discloses:

- switching device identifying a keyword in the first request, wherein the keyword indicates the format of the information contained in the first request (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 22, Daly further discloses:

- parsing the information contained in the first request according to the format identified by the keyword (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 23, Daly discloses a network interface for enabling communications between a first network having a first protocol and a second network having a second protocol comprising:

- a server configured to receive a first request from a device on the first network, wherein the first request contains an indicator that the first request is directed to a device on the second network (col. 1, lines 22-41, abstract, col. 3, lines 17-67 and col. 4, lines 1-25); and
- a client coupled to the server and configured to receive information from the server indicating the device on the second network and the information requested from the device on the second network (abstract, col. 3, lines 17-67 and col. 4, lines 1-25);

- wherein the client is further configured to generate a second request and to transmit the second request to the device on the second network (abstract, col. 3, lines 17-67 and col. 4, lines 1-25) ;
- wherein the client is further configured to receive the requested information from the device on the second network and to convey the requested information to the server(abstract, col. 3, lines 17-67 and col. 4, lines 1-25); and
- wherein the server is configured to transmit the requested information to the device on the first network (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 24, Daly discloses:

- wherein the server is an HTTP server, the client is an HTTP client, and the first and second requests are uniform resource locators (URLs) (abstract, col. 1, lines 22-41, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 25, Daly discloses:

- wherein the URL corresponding to the first request includes an address corresponding to the server and wherein the indicator comprises a predetermined key word (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 26, Daly discloses:

- wherein the URL corresponding to the first request contains a URL following the key word,
- wherein the client is configured to produce the URL following the key word as the URL corresponding to the second request (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 27, Daly discloses:

- wherein the TCP server is configured to detect URLs containing the key word and the TCP client is configured to generate new URLs corresponding to the detected URLs, wherein the new URLs do not contain the key word (abstract, col. 3, lines 17-67, col. 4, lines 1-67 and col. 5, lines 1-15).

As per claim 28, Daly discloses

- wherein the client is configured to generate requests which are formatted according to a physical layer protocol that is different than the physical layer protocol according to which the first request is transmitted to the server (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

As per claim 29, Daly discloses:

- wherein the network interface comprises a switch containing the server and the client (abstract, col. 3, lines 17-67 and col. 4, lines 1-25).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daly in view of Sridhar et al (hereinafter, "Sridhar", 6,266,701).

As per claim 6, Daly discloses the invention substantially as claimed.

Art Unit: 2157

However, Daly does not explicitly disclose:

- wherein the system further comprises a firewall which is separate from the switch.

Sridhar discloses a communication system for improving communication over a data network between an application and remote systems including:

- wherein the system further comprises a firewall which is separate from the switch (col. 1, lines 54-64).

Given the teaching of Sridhar, it would have been obvious to one of ordinary skill in the art to modify Daly by including a firewall between the networks in order examine each message entering or leaving the network and blocking those that do not meet security criteria preventing any unauthorized user from accessing private networks.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,427,071 to Adams et al

U.S. Pat. No. 6,389,130 to Shenoda et al

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaShonda T. Jacobs whose telephone number is 703-305-7494. The examiner can normally be reached on 8:30 AM - 5:00 PM.

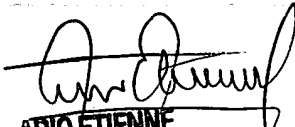
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 703-308-7562. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2157

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

LaShonda T. Jacobs
Examiner
Art Unit 2157

ltj
November 2, 2003



ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100